

21978 Protein Sequences PCT  
SEQUENCE LISTING

&lt;110&gt; INSERM

SANOFI-AVENTIS

<120> USE OF ANTAGONISTS TO THE CB1 RECEPTOR FOR THE MANUFACTURE OF A  
COMPOSITION USEFUL FOR THE TREATMENT OF HEPATIC DISEASES

&lt;130&gt; CB1

&lt;150&gt; EP04290633

&lt;151&gt; 2004-03-09

&lt;160&gt; 9

&lt;170&gt; PatentIn version 3.1

&lt;210&gt; 1

&lt;211&gt; 472

&lt;212&gt; PRT

&lt;213&gt; Human

&lt;400&gt; 1

Met Lys Ser Ile Leu Asp Gly Leu Ala Asp Thr Thr Phe Arg Thr Ile  
1 5 10 15

Thr Thr Asp Leu Leu Tyr Val Gly Ser Asn Asp Ile Gln Tyr Glu Asp  
20 25 30

Ile Lys Gly Asp Met Ala Ser Lys Leu Gly Tyr Phe Pro Gln Lys Phe  
35 40 45

Pro Leu Thr Ser Phe Arg Gly Ser Pro Phe Gln Glu Lys Met Thr Ala  
50 55 60

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Gly Asp Asn Pro Gln Leu Val Pro Ala Asp Gln Val Asn Ile Thr Glu  
 65 70 75 80  
 Phe Tyr Asn Lys Ser Leu Ser Ser Phe Lys Glu Asn Glu Glu Asn Ile  
 85 90 95  
 Gln Cys Gly Glu Asn Phe Met Asp Ile Glu Cys Phe Met Val Leu Asn  
 100 105 110  
 Pro Ser Gln Gln Leu Ala Ile Ala Val Leu Ser Leu Thr Leu Gly Thr  
 115 120 125  
 Phe Thr Val Leu Glu Asn Leu Leu Val Leu Cys Val Ile Leu His Ser  
 130 135 140  
 Arg Ser Leu Arg Cys Arg Pro Ser Tyr His Phe Ile Gly Ser Leu Ala  
 145 150 155 160  
 Val Ala Asp Leu Leu Gly Ser Val Ile Phe Val Tyr Ser Phe Ile Asp  
 165 170 175  
 Phe His Val Phe His Arg Lys Asp Ser Arg Asn Val Phe Leu Phe Lys  
 180 185 190  
 Leu Gly Gly Val Thr Ala Ser Phe Thr Ala Ser Val Gly Ser Leu Phe  
 195 200 205  
 Leu Thr Ala Ile Asp Arg Tyr Ile Ser Ile His Arg Pro Leu Ala Tyr  
 210 215 220  
 Lys Arg Ile Val Thr Arg Pro Lys Ala Val Val Ala Phe Cys Leu Met  
 225 230 235 240  
 Trp Thr Ile Ala Ile Val Ile Ala Val Leu Pro Leu Leu Gly Trp Asn  
 245 250 255  
 Cys Glu Lys Leu Gln Ser Val Cys Ser Asp Ile Phe Pro His Ile Asp  
 260 265 270  
 Glu Thr Tyr Leu Met Phe Trp Ile Gly Val Thr Ser Val Leu Leu Leu  
 275 280 285  
 Phe Ile Val Tyr Ala Tyr Met Tyr Ile Leu Trp Lys Ala His Ser His  
 290 295 300

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Ala Val Arg Met Ile Gln Arg Gly Thr Gln Lys Ser Ile Ile Ile His  
 305 310 315 320

Thr Ser Glu Asp Gly Lys Val Gln Val Thr Arg Pro Asp Gln Ala Arg  
 325 330 335

Met Asp Ile Arg Leu Ala Lys Thr Leu Val Leu Ile Leu Val Val Leu  
 340 345 350

Ile Ile Cys Trp Gly Pro Leu Leu Ala Ile Met Val Tyr Asp Val Phe  
 355 360 365

Gly Lys Met Asn Lys Leu Ile Lys Thr Val Phe Ala Phe Cys Ser Met  
 370 375 380

Leu Cys Leu Leu Asn Ser Thr Val Asn Pro Ile Ile Tyr Ala Leu Arg  
 385 390 395 400

Ser Lys Asp Leu Arg His Ala Phe Arg Ser Met Phe Pro Ser Cys Glu  
 405 410 415

Gly Thr Ala Gln Pro Leu Asp Asn Ser Met Gly Asp Ser Asp Cys Leu  
 420 425 430

His Lys His Ala Asn Asn Ala Ala Ser Val His Arg Ala Ala Glu Ser  
 435 440 445

Cys Ile Lys Ser Thr Val Lys Ile Ala Lys Val Thr Met Ser Val Ser  
 450 455 460

Thr Asp Thr Ser Ala Glu Ala Leu  
 465 470

<210> 2

<211> 411

<212> PRT

<213> Human

<400> 2

Met Ala Leu Gln Ile Pro Pro Ser Ala Pro Ser Pro Leu Thr Ser Cys  
 1 5 10 15

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Thr Trp Ala Gln Met Thr Phe Ser Thr Lys Thr Ser Lys Glu Asn Glu  
 20 25 30  
 Glu Asn Ile Gln Cys Gly Glu Asn Phe Met Asp Ile Glu Cys Phe Met  
 35 40 45  
 Val Leu Asn Pro Ser Gln Gln Leu Ala Ile Ala Val Leu Ser Leu Thr  
 50 55 60  
 Leu Gly Thr Phe Thr Val Leu Glu Asn Leu Leu Val Leu Cys Val Ile  
 65 70 75 80  
 Leu His Ser Arg Ser Leu Arg Cys Arg Pro Ser Tyr His Phe Ile Gly  
 85 90 95  
 Ser Leu Ala Val Ala Asp Leu Leu Gly Ser Val Ile Phe Val Tyr Ser  
 100 105 110  
 Phe Ile Asp Phe His Val Phe His Arg Lys Asp Ser Arg Asn Val Phe  
 115 120 125  
 Leu Phe Lys Leu Gly Gly Val Thr Ala Ser Phe Thr Ala Ser Val Gly  
 130 135 140  
 Ser Leu Phe Leu Thr Ala Ile Asp Arg Tyr Ile Ser Ile His Arg Pro  
 145 150 155 160  
 Leu Ala Tyr Lys Arg Ile Val Thr Arg Pro Lys Ala Val Val Ala Phe  
 165 170 175  
 Cys Leu Met Trp Thr Ile Ala Ile Val Ile Ala Val Leu Pro Leu Leu  
 180 185 190  
 Gly Trp Asn Cys Glu Lys Leu Gln Ser Val Cys Ser Asp Ile Phe Pro  
 195 200 205  
 His Ile Asp Glu Thr Tyr Leu Met Phe Trp Ile Gly Val Thr Ser Val  
 210 215 220  
 Leu Leu Leu Phe Ile Val Tyr Ala Tyr Met Tyr Ile Leu Trp Lys Ala  
 225 230 235 240  
 His Ser His Ala Val Arg Met Ile Gln Arg Gly Thr Gln Lys Ser Ile  
 245 250 255

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Ile Ile His Thr Ser Glu Asp Gly Lys Val Gln Val Thr Arg Pro Asp  
 260 265 270

Gln Ala Arg Met Asp Ile Arg Leu Ala Lys Thr Leu Val Leu Ile Leu  
 275 280 285

Val Val Leu Ile Ile Cys Trp Gly Pro Leu Leu Ala Ile Met Val Tyr  
 290 295 300

Asp Val Phe Gly Lys Met Asn Lys Leu Ile Lys Thr Val Phe Ala Phe  
 305 310 315 320

Cys Ser Met Leu Cys Leu Leu Asn Ser Thr Val Asn Pro Ile Ile Tyr  
 325 330 335

Ala Leu Arg Ser Lys Asp Leu Arg His Ala Phe Arg Ser Met Phe Pro  
 340 345 350

Ser Cys Glu Gly Thr Ala Gln Pro Leu Asp Asn Ser Met Gly Asp Ser  
 355 360 365

Asp Cys Leu His Lys His Ala Asn Asn Ala Ala Ser Val His Arg Ala  
 370 375 380

Ala Glu Ser Cys Ile Lys Ser Thr Val Lys Ile Ala Lys Val Thr Met  
 385 390 395 400

Ser Val Ser Thr Asp Thr Ser Ala Glu Ala Leu  
 405 410

<210> 3

<211> 20

<212> PRT

<213> Human

<400> 3

Phe Arg Thr Ile Thr Thr Asp Leu Leu Tyr Val Gly Ser Asn Asp Ile  
 1 5 10 15

Gln Tyr Glu Asp  
 20

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&lt;210&gt; 4

&lt;211&gt; 23

&lt;212&gt; PRT

&lt;213&gt; Human

&lt;400&gt; 4

Asp Met Ala Ser Lys Leu Gly Tyr Phe Pro Gln Lys Phe Pro Leu Thr  
1 5 10 15

Ser Phe Arg Gly Ser Pro Phe  
20

&lt;210&gt; 5

&lt;211&gt; 20

&lt;212&gt; PRT

&lt;213&gt; Human

&lt;400&gt; 5

Thr Glu Phe Tyr Asn Lys Ser Leu Ser Ser Phe Lys Glu Asn Glu Glu  
1 5 10 15

Asn Ile Gln Cys  
20

&lt;210&gt; 6

&lt;211&gt; 20

&lt;212&gt; PRT

&lt;213&gt; Human

&lt;400&gt; 6

Arg Met Ile Gln Arg Gly Thr Gln Lys Ser Ile Ile Ile His Thr Ser  
1 5 10 15

Glu Asp Gly Lys  
20

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&lt;210&gt; 7

&lt;211&gt; 12

&lt;212&gt; PRT

&lt;213&gt; Human

&lt;400&gt; 7

Val Tyr Asp Val Phe Gly Lys Met Asn Lys Leu Ile  
1 5 10

&lt;210&gt; 8

&lt;211&gt; 20

&lt;212&gt; PRT

&lt;213&gt; Human

&lt;400&gt; 8

His Lys His Ala Asn Asn Ala Ala Ser Val His Arg Ala Ala Glu Ser  
1 5 10 15

Cys Ile Lys Ser  
20

&lt;210&gt; 9

&lt;211&gt; 20

&lt;212&gt; PRT

&lt;213&gt; Human

&lt;400&gt; 9

His Lys His Ala Asn Asn Thr Ala Ser Met His Arg Ala Ala Glu Ser  
1 5 10 15

Cys Ile Lys Ser  
20